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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,160	12/29/2000	Merle L. Miller	2069.008400	8960
23720	7590	12/01/2005	EXAMINER	
WILLIAMS, MORGAN & AMERSON, P.C. 10333 RICHMOND, SUITE 1100 HOUSTON, TX 77042			HAROLD, JEFFEREY F	
			ART UNIT	PAPER NUMBER
			2646	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,160

Applicant(s)

MILLER ET AL.

Examiner

Jefferey F. Harold

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-18 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-15 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. ***Claims 1-4, and 16*** are rejected under 35 U.S.C. 102(b) as being anticipated by O'Toole et al. (United States Patent 5,889,856), hereinafter referenced as O'Toole.

Regarding claim 1, O'Toole discloses an ADSL integrated line card with digital splitter and POTS CODEC without bulky analog splitter. In addition, O'Toole discloses method for DC feed control for a line card, comprising: receiving a signal from a subscriber line comprising at least one of a voice component and a DC component; converting the voice component of the signal to a digital voice signal using an analog-to-digital converter to allow further processing of the digital voice signal; converting the DC component of the signal to a digital signal using the analog-to-digital converter employed to convert the voice component of the signal; and adjusting a DC feed to the subscriber line based on the digital signal, as disclosed at column 6, line 30 through column 8, line 29 and exhibited in figures 5 and 6.

Regarding claim 2, O'Toole discloses everything claimed as applied above (see claim 1), in addition, O'Toole discloses wherein adjusting the DC feed comprises; integrating the digital signal; and adjusting the voltage provided to the subscriber line

based on the integrated signal, as disclosed at column 6, line 30 through column 8, line 29 and exhibited in figures 5 and 6.

Regarding claim 3, O'Toole discloses everything claimed as applied above (see claim 1), in addition, O'Toole discloses wherein adjusting the DC feed comprises adjusting a current level applied to the subscriber line, as disclosed at column 6, line 30 through column 8, line 29 and exhibited in figures 5 and 6.

Regarding claim 4, O'Toole discloses everything claimed as applied above (see claim 2), in addition, O'Toole discloses wherein allowing further processing of the digital voice signal comprises providing the digital voice signal to a CODEC for further processing, as disclosed at column 6, line 30 through column 8, line 29 and exhibited in figures 5 and 6.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5-15, 20-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Pang et al. (United States Patent 6,671,373), hereinafter referenced as Pang.

Regarding claim 5, Pang discloses a method and apparatus for DC feed control. In addition, Pang discloses a method for DC feed control for a line card, comprising: determining if the line card is operating in a current limit region of a DC feed curve;

synthesizing a curve in the current limit region of the DC feed curve; determining a loop voltage based on the synthesized curve; and applying the loop voltage to the subscriber line, as disclosed at column 4, line 26 through column 7, line 33 and exhibited in figures 2-5.

Regarding claim 6, Pang discloses everything claimed as applied above (see claim 5), in addition Pang discloses generating a current value proportional to a loop current flowing from the subscriber line; and determining if the line card is operating in the current limit region of the DC feed curve in response to generating the current value, as disclosed at column 4, line 26 through column 7, line 33 and exhibited in figures 2-5.

Regarding claim 7, Pang discloses everything claimed as applied above (see claim 6), in addition Pang discloses wherein determining if the line card is operating in the current limit region of the DC feed curve in response to generating the current value includes determining if the loop current is greater than a first preselected value, as disclosed at column 4, line 26 through column 7, line 33 and exhibited in figures 2-5.

Regarding claim 8, Pang discloses everything claimed as applied above (see claim 5), in addition Pang discloses determining the loop voltage in at least one of an anti-saturation region and a resistance feed region in response to determining the line card is not operation in the current limit region.

Regarding claim 9-15 and 20-25, they are interpreted and thus rejected for the reasons set forth above in the rejection of claims 5-8.

Allowable Subject Matter

Claims 16-18 are allowed.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH
November 28, 2005



Jefferey F Harold
Primary Examiner
Art Unit 2646